10522861 - GAU: 31

PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: ZSCHUNKE ET AL 2 PCT

Serial No.: 10/522,861

Group: 2631

FILED:

JANUARY 3, 2005

FOR:

METHOD FOR DIVIDING THE BIT RATE OF OPSK SIGNALS

INTO TWO OR SEVERAL SUBCHANNELS

INFORMATION DISCLOSURE STATEMENT

Mail Stop: AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA. 22313-1450

Dear Sir:

Applicants are enclosing Form PTO-1449 disclosing references cited in the present application and/or by the German Patent Office, and/or the German Priority Patent and/or International Search Report (copy enclosed).

REFERENCES CITED IN US SPECIFICATION

U.S. Patent No. 4,680,777 is discussed in the present Specification on page 3 in the first full paragraph.

The following references are enclosed:

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"Nachrichtentechnik" [Communications Technology] by E.

Herter/W. Lörcher, 5th edition, which appeared in the Hanser

Verlag [publishing company] in 1990, pages 110 ff. discussed in
the Specification on page 1 in the 2nd paragraph;

IEEE Transactions on Communications COM-15, No. 6 (December 1967) pages 805-811, discussed on page 23, in the first full paragraph;

D. Saha and G. Birdsall: IEEE Transactions on Communications 37, No. 5 (May 1989), pages 437 to 448 discussed on page 2 in line 8 of the Specificiation and in the German Priority document;

"Datenübertragung" [Data Transmission], Volume I,
Fundamentals, 2nd edition 1983, Berlin, Springer Verlag
[publishing company], ISBN 3-540-12117-X, pgs. 110 to 124 and
pages 144-150 discussed in the Preliminary Amendment;

Manual by J. Huber: "Trelliscodierung" [Trellis Coding],
Springer Verlag, 1992 under the series Nachrichtentechnik
[Communications Technology], 21, ISBN 3-540-55792-X, pages 12, 13

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discussed in the Preliminary Amendment.

The following references will be forwarded when they are available:

IEEE Transactions on Communications COM-29, No. 7 (July 1981), pages 982-989 discussed on page 23, in the first full paragraph;

IEEE Transactions on Communications, Vol. 42, No. 2/3/4,
February/March/April 1994, page 1465 discussed in the Preliminary
Amendment.

CITED IN GERMAN PRIORITY DOCUMENT AND/OR BY THE GERMAN PATENT AND TRADEMARK OFFICE

The following documents were cited in the German priority document and/or by the German Patent and Trademark Office:

SARI, Hikmet: A generalization of multidimensional modulation IN: IEEE Communications, 1995. ICC 95 Seattle, Gateway to Globalization, 1995 IEEE International Conference on, Volume:

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.T./

2, 18-22 June 1995 Page(s): 683 - 687 vol 2.;

VIGIL, A. J. u .a.: Finite Truncated Cosine Series Design of Full Response Signaling Offset Quadrature Binary Modulation

Systems, IN: IEEE Transactions on Communications, Vol. 42, No. 2/3/4, February/March/April 1994, 5. 1465- 1470;

VISINTIN, Monica u. a.: Four-Dimensional Signaling for Bandlimited Channels, / IN IEEE Transactions an Communications, Vol. 42, No. 2/3/4, February/March/April 1994, 5. 403 - 409;

The following references will be forwarded when they are available:

BOCKER, Peter: Datenubertragung, Band I, Grundlagen, 2.

Aufl. 1983, Berlin u. a., Springer-Verlag, ISBN 3-540-12117-X, S.

110- 124 u. 144- 150.

REFERENCES CITED IN THE INTERNATIONAL SEARCH REPORT:

The following two (2) references cited in the International

R:\Patents\Z\ZSCHUNKE ET AL 2 PCT\IDS.wnd\mg - 4 -

Search Report, are also enclosed:

Gruenbacher D M et al: "N Dimensional Orthogonal QPSK
Signaling with Discrete Prolate Spheroidal Sequences" Radio and
Wireless Conference, 1998, Colorado Springs, Co, USA 9-12 August
1998, Pages 63-68, Xp 010296329 New York, USA, and Waldeck B H et
Al:

"Performance Evaluation of TFO-Q2PSK in Gaussian, Multipath and Fading Channels" 1999 Ieee Africon 5th, Africon Conference in Africa, Cape Town, South Africa, 28 September 1999- October 1999, Pages 233-238 XP 000895832 New York, USA.

Since this Information Disclosure Statement is being filed prior to a first Office Action, it is believed that no fee is due. However, if it is determined that a fee is due, the Commissioner is hereby authorized to charge, or to credit any over payment, to our Deposit Account Number 03-2468.

It is respectfully requested that this Information

- 5 -

Disclosure Statement be considered and placed into the application file.

Respectfully submitted, Wilmut ZSHUNKE ET AL 2 PCT

Allison C. Collard, Reg. No. 22,532 Frederick J. Dorchak, Reg. No. 29,298 Edward R. Freedman, Reg. No. 26,048

Attorneys for Applicants
White About Control
Reg No. 35,103

COLLARD & ROE, P.C. 1077 Northern Boulevard Roslyn, New York 11576 (516) 365-9802

Enclosures:

PTO-form 1449

International Search Report

International Preliminary Examination Report

10 References

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: COMMISSIONER OF PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450 on November 14, 2005.

Page <u>1</u> of <u>2</u>

FORM PTC-1449 (Modified) U.S. DEPARTUENT OF COMMERCE (REV. 7-80) (REV. 7-80) LIST OF RESERVANDES OFFEIT APPLICANT (U.S. DEPARTUENT) NOV I 7 7805				ATTY. DOCKET NO: ZSHUNKE ET AL 2 PCT 10/522,861 APPLICANT: William ZSHUNKE ET AL PILMS DATE: GROUP:					
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLA	ss	SUBCLASS	FILIN IF APPR	G DATE OPRIATE
/H.T./	AA	4680777	7/1987	SAHA (German Priority)					
/H.T./	AB	6278732	8/2002	BEIDAS BASSEL F ET AL (Intl. Srch. Rep.)					
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AE	"Datenübertragung" [Data Transmission], BOCKER, Peter, Volume I, Fundamentals, 2nd edition 1983,								
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AF		uenbacher D M et al: "A Simple Algorithm for Generating Discrete Prolate Spheroidal Sequences: IEEE pactions on Gignal Processing Vol. 42, No. 11, November 1994 Page 3276-3276, XP002269014 New							
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AG	York, USA (Intl. Srch. Rep.) TO FOLLOW Gruenbacher D M et al: "N Dimensional Orthogonal QPSK Signaling with Discrete Prolate Spheroidal Sequences" Radio and Wireless Conference, 1998, Colorado Springs, Co, USA 9-12 August 1998, Pages 63- 68, XP 010296329 New York, USA (Intl. Srch. Rep.) ENCLOSED								
АН	Huber,	J, Manual .: "Trellisco	odieruna" (Ti	ellis Coding), Springer Verlag, 19	992 unde	er the	e series		
	Huber, J, Manual :: "Trelliscodierung" [Trellis Coding], Springer Verlag, 1992 under the series Nachrichtentechnik [Communications Technology], 21, ISBN 3-540-55792-X, pgs 12, 13 (Preliminary Amendment & German Priority) ENCLOSED								
Al		nament & German Priority] ENCLOSED A, Debarata, BIRDSALL, Theodore G.: Quadrature-Quadrature Phase-Shift Keying, IN: IEEE Transactions and munications, Vol. 37, No. 5, May 1989, S.437 - 448. (Specification & German Priority) ENCLOSED							
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	01	HER REFERENCES (Includi	ng Author, Title, Date, Pertine	ent Pages, Etc.)				
AA	SARI, Hikmet: A generalization of multidimensional modulation IN: IEEE Communications, 1995. ICC 95 Seattle, Gateway to Globalization, 1995 IEEE International Conference on, Volume: 2, 18-22 June 1995 Page(s): 683 - 687 vol 2. (German Priority) ENCLOSED							
AB	VIGIL, A. J. u. a.: Finite Truncated Cosine Series Design of Full Response Signaling Offset Binary Modulation Systems, IN: IEEE Transactions on Communications, Vol. 42, No. 2/3/4, February/March/April 1994, 5. 1465- 1470. (German Priority) ENCLOSED							
AC	Waldeck B H et Al: "Performance Evaluation of TFO-Q°PSK in Gaussian, Multipath and Fading Channels" 1999 leee Africon 5 th , Africon Conference in Africa, Cape Town, South Africa, 28 September 1999- October 1999, Pages 233-238 XP 000895832 New York, USA (Intl. Srch. Rep.) ENCLOSED							
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AE	IEEE Transactions on Communications COM-15, No. 6 (Dec. 1967) pgs 805-811 SALTZBERG, Burton, R. (Specification) ENCLOSED							
AF			ol. 42, No. 2/3/4, Eebruary/Mar	ch/April 1994, pages 1465				
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AG	IEEE Transactions on Communications, Vol. 42, No. 2/3/4, February/March/April 1994, S. 403 - 409. VISINTIN, Monica u. a.: Four-Dimensional Signaling for Bandlimited Channels, / IN (German Priority) ENCL.							
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